

INCH-POUND

A-A-20164C

February 27, 2004

SUPERSEDING

A-A-20164B

February 29, 1996

COMMERCIAL ITEM DESCRIPTION

NUTS, SHELLED, ROASTED

The U.S. Department of Agriculture (USDA) has authorized the use of this Commercial Item Description (CID).

1. SCOPE. This CID covers shelled roasted nuts, packed in commercially acceptable containers, suitable for use by Federal, State, local governments, and other interested parties; and as a component of operational rations.

2. PURCHASER NOTES.

2.1 Purchasers *shall specify* the following:

- Type(s) and style(s) of roasted nuts required (Sec. 3).
- When analytical requirements are different than specified (Sec. 6.1).
- When analytical requirements need to be verified (Sec. 6.2).
- Manufacturer's/distributor's certification. (Sec. 9.2) or USDA certification (Sec. 9.3).

2.2 Purchasers *may specify* the following:

- Manufacturer's quality assurance (Sec. 9.1 with 9.1.1) or (Sec. 9.1 with 9.1.2).
- Packaging requirements other than commercial (Sec. 10).

3. CLASSIFICATION. The shelled roasted nuts shall conform to the following list, which shall be specified in the solicitation, contract, or purchase order.

Types and styles.

- Type I** - Mixed nuts without peanuts
- Type II** - Mixed nuts with peanuts
- Type III** - Mixed nuts without peanuts, dry roasted
- Type IV** - Peanuts, roasted
 - (a) Virginia type or Runner type (blanched)
 - (b) Spanish type (unblanched)
- Type V** - Peanuts, Virginia type or Runner type, dry roasted

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- Type VI** - Cashews
Type VII - Cashews, dry roasted
Type VIII - Peanuts, Runner type, roasted, sweetened (unblanched)
Type IX - Almonds, smoke flavored (unblanched)
Type X - Other

Style A - Salted

Style B - Unsalted (No sodium chloride added during processing).

4. MANUFACTURER'S/DISTRIBUTOR'S NOTES. Manufacturer's/distributor's products *shall meet the requirements of the:*

- Salient characteristics (Sec. 5).
- Analytical requirements: *as specified by the purchaser* (Sec. 6).
- Manufacturer's/distributor's product assurance (Sec. 7).
- Regulatory requirements (Sec. 8).
- Quality assurance provisions: *as specified by the purchaser* (Sec. 9).
- Packaging requirements other than commercial: *as specified by the purchaser* (Sec. 10).

5. SALIENT CHARACTERISTICS.

5.1 Raw materials.

5.1.1 Almonds. The shelled almonds shall be U.S. No. 1 (or better) as specified in the U.S. Standards for Grades of Shelled Almonds.

5.1.2 Brazil nuts. The Brazil nuts shall be U.S. No. 1 as specified in the U.S. Standards for Grades of Brazil Nuts in the Shell.

5.1.3 Cashews. The cashews shall be of good commercial quality.

5.1.4 Filberts. The filberts shall be U.S. No. 1 as specified in the U.S. Standards for Grades of Filberts in the Shell.

5.1.5 Pecans. The shelled pecans shall be U.S. No. 1 Pecan halves as specified in the U.S. Standard for Grades of Shelled Pecans. Size designation shall be Extra Large to Mammoth.

5.1.6 Peanuts. The shelled raw peanuts shall meet the quality requirements of Table I.

TABLE I. Peanut quality requirements

Type II	Type IV(a) & Type V	Type IV(b)	Type VIII
U.S. Extra Large Virginia <u>1/</u> or Jumbo Grade <u>2/</u>	U.S. Medium Virginia, U.S. Extra Large Virginia <u>1/</u> or U.S. No. 1 Runner <u>3/</u>	U.S. No. 1 Spanish <u>4/</u>	Jumbo Grade <u>2/</u>

1/ U.S. Standards for Grades of Shelled Virginia Type Peanuts.

2/ American Peanut Shellers Association's Grades for Shelled Runner Peanuts.

3/ U.S. Standards for Grades of Shelled Runner Type Peanuts.

4/ U.S. Standards for Grades of Shelled Spanish Type Peanuts.

5.1.6.1 Aflatoxin testing. All shelled raw peanuts used in the finished product shall be sampled by the Fresh Products Branch (FPB), Fruit and Vegetable Programs (FVP), Agricultural Marketing Service (AMS), USDA, for aflatoxin testing. The shelled raw peanuts shall be tested for aflatoxin by the Science and Technology Programs (STP), AMS, USDA. Failure to meet Food and Drug Administration (FDA) guidelines for aflatoxin shall be cause for rejection of the lot.

5.1.7 Foreign material/defects. The shelled raw nuts shall be clean, sound, and wholesome, provided that not more than 5 percent, by weight, of the shelled raw nuts shall be affected by any defect which materially detracts from the appearance of the nut and further provided that not more than 2 percent, by weight, shall be affected by rancidity, mold, decay, or insect or worm injury.

5.1.8 Count. The shelled raw nuts shall meet the count requirements of Table II.

TABLE II. Count of shelled raw nuts

Component	Type	Unit of Measure <u>5/</u>	Nuts (by count)	
			Min	Max
Cashews	I, II, III, VI or VII	Pound	220	320
Pecans halves	I, II, or III	Pound	200	450
Filberts	I, II, or III	Pound	320	520
Brazil nuts	I, II, or III	Pound	110	190
Almonds	I, II, or III	Ounce	18	30
	IX	Ounce	25	36

TABLE II. Count of shelled raw nuts (continued)

Component	Type	Unit of Measure <u>5/</u>	Nuts (by count)	
			Min	Max
Peanuts, Virginia type	II or IV (a)	Ounce	28	32
Peanuts, Runner type	II, IV (a), or VIII	Ounce	36	42
Peanuts, Spanish type	IV (b)	Ounce	54	58

5/ 1 lb is equal to 454 g. 1 oz equal to 28.35 g.

5.1.9 Sampling and examination of shelled raw nuts. Sampling and examination of shelled raw nuts for conformance to the raw material and count requirements shall be in accordance with FPB, FVP, AMS, USDA procedures. Nonconformance to the raw material requirements or the count per pound/ounce shall be cause for rejection of the lot.

5.2 Processing. Roasting oil shall be refined vegetable oil. No coconut, palm, or palm kernel oil shall be allowed in the cooking process. The oil shall be thoroughly refined, deodorized, and free from rancidity and objectionable flavor. In addition, the roasting oil shall be stabilized with suitable antioxidants. If used, the salt shall be of Food Chemicals Codex purity, white, refined sodium chloride with or without anticaking agents, free from extraneous matter, and may be treated with antioxidants. If nuts are oil roasted, granule size or type of salt shall be dendritic or fine flake salt. If nuts are dry roasted, a flour salt or a pulverized salt, 85 percent of which shall pass through a U.S. Standard No. 200 sieve, shall be used. Iodized salt shall not be used. Dressing oil shall conform to the requirements for roasting oil and shall be used only to the extent necessary with this type of product. If the salt does not have antioxidants, dressing oil shall be treated with antioxidants. Cereal adjuncts shall be food starch, modified starch, dextrin, and gum, which may be used as a binder or filler. In addition, the product may contain spices (including paprika), natural flavors, or yeast to produce a desirable finished product. For Type VIII shelled roasted sweetened peanuts, a coating containing honey, sugar and/or corn syrup shall be applied after roasting.

5.3 Finished product. The finished shelled roasted nuts shall be crisp, palatable, and shall not contain bitter, musty, sour, rancid, stale, sprouty, or other undesirable flavors and odors. Nuts shall not be excessively hard and there shall be no evidence of burnt nuts. If used, salt shall be evenly distributed throughout the nuts, and the surface of the nuts shall show no excessive caking of salt. The nuts shall not be excessively coated with oil, and the blanched nuts shall be bright. The product shall not contain mildew stains, husks, filth, or other extraneous matter. The finished shelled roasted nuts shall comply with the requirements specified in Table III through Table VI, as applicable. Type VIII shelled roasted sweetened peanuts shall possess a fresh roasted peanut flavor and odor with a secondary sweet, slightly salty flavor. The Type VIII shelled roasted sweetened peanuts shall be a light to medium brown with an internal light brown

color and the surfaces shall be dry (not tacky) to the touch. Type IX smoke flavored almonds shall possess a characteristic fresh roasted, smoked almond odor and flavor. The Type IX smoke flavored almonds shall be whole, the cinnamon brown skin intact with an evenly distributed coating of fine salt. The smoke flavored almonds shall have a firm crisp bite and chew, with a fresh nut texture, but not excessively hard or dry.

TABLE III. Composition of mixed nuts

Component	<u>Type I</u>		<u>Type II</u>		<u>Type III</u>	
	Percent (by weight) Min	Max	Percent (by weight) Min	Max	Percent (by weight) Min	Max
Cashews	35.0	60.0	30.0	40.0	45.0	55.0
Pecans	18.0	22.0	20.0	24.0	18.0	22.0
Almonds	13.0	17.0	15.0	19.0	13.0	17.0
Filberts	4.0	6.0	4.0	6.0	4.0	6.0
Brazil nuts	8.0	10.0	8.0	10.0	8.0	10.0
Peanuts, Virginia type or Runner type (blanched) or mixture thereof	---	---	8.0	10.0	---	---
Cereal adjuncts	---	---	---	---	2.0	3.0
Salt (coating) (if specified)	.05	2.0	0.5	2.0	0.5	2.0

TABLE IV. Composition of single variety nuts 6/

Component	<u>Percent (by weight)</u>	
	Not less than	Not more than
Type IV (a)		
Peanuts, Virginia type or Runner type, roasted (blanched)	98.0	99.5
Salt (coating) (if specified)	0.5	2.0
Type IV (b)		
Peanuts, Spanish type, roasted (unblanched)	98.0	99.5
Salt (coating) (if specified)	0.5	2.0

TABLE IV. Composition of single variety nuts 6/ (continued)

Component	<u>Percent (by weight)</u>	
	Not less than	Not more than
Type V		
Peanuts, Virginia type or Runner type, dry roasted	95.0	97.5
Cereal adjuncts	1.0	4.0
Salt (coating) (if specified)	1.0	3.0
Type VI		
Cashews	98.0	99.5
Salt (coating) (if specified)	0.5	2.0
Type VII		
Cashews, dry roasted	95.0	99.0
Cereal adjuncts	0.5	4.0
Salt (coating) (if specified)	0.1	3.0
Type VIII		
Peanuts, Runner type, roasted, sweetened (unblanched)	98.0	99.5
Salt (coating)	0.5	1.5
Type IX		
Almonds, smoke flavored (unblanched)	98.0	99.5
Salt (coating)	1.2	1.8

6/ Style, B, Type IV peanuts and Style B, Type VI cashews shall consist of 100 percent peanuts and cashews, respectively.

TABLE V. Defects of Type I – IX nuts

Type	Broken <u>7/</u>	<u>Splits 8/</u> <u>Percent (by weight)</u>	Small pieces <u>9/</u> , <u>10/</u>
		Not more than	
Type I	17.0	----	4.0
Type II	18.0	----	4.0
Type III	18.0	----	4.0

TABLE V. Defects of Type I – IX nuts (continued)

Type	Broken <u>7/</u>	Splits <u>8/</u> <u>Percent (by weight)</u> Not more than	Small pieces <u>9/</u> , <u>10/</u>
Type IV (a)	----	25.0	4.0
Type IV (b)	----	5.0	4.0
Type V	----	25.0	4.0
Type VI	----	25.0	4.0
Type VII	----	25.0	4.0
Type VIII	----	10.0	4.0
Type IX	----	10.0	4.0

7/ For peanuts, filberts, and brazil nuts, broken means that more than one fourth of the kernel is estimated to be broken off. For pecan halves and almonds, broken means that more than one-eighth of the kernel is estimated to be broken off. However, split nuts are not to be classified as broken. See footnote 8/.

8/ A split means the separated half of the kernel.

9/ A small piece is defined as any piece one fourth or less of the kernel.

10/ Results will be reported to the nearest 0.1 percent.

5.4 Sampling and examination of finished product. Sampling and examination of shelled roasted nuts for conformance to the finished product requirements shall be in accordance with Processed Products Branch (PPB), FVP, AMS, USDA procedures.

5.4.1 Examination for composition of mix (types I, II, and III). Examination shall be performed to determine conformance with Table III. The sample for examination shall be a composite of not less than 80 ounces (2.268 kg) of product. The following chart is to be used as a guide for determining the minimum number of sample units to use for deriving the composite for examination:

Container size		Minimum number of sample units
Greater than or equal to	but less than	
0 oz (0 g)	5 oz (141.75 g)	20 <u>11/</u>
5 oz (141.75 g)	6 oz (170.10 g)	16
6 oz (170.10 g)	7 oz (198.45 g)	14
7 oz (198.45 g)	8 oz (226.80 g)	12
8 oz (226.80 g)	9 oz (255.15 g)	10

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Container size		Minimum number of sample units
Greater than <u>or equal to</u>	but less than	
9 oz (255.15 g)	10 oz (283.50 g)	9
10 oz (283.50 g)	12 oz (340.19 g)	8
12 oz (340.19 g)	14 oz (396.89 g)	7
14 oz (396.89 g)	16 oz (453.59 g)	6
16 oz and up (453.59 g and up)		5

11/ The composite for examination must consist of a minimum of 80 oz (2.268 kg) of product. For mixed nuts in containers smaller than 4 oz (113.40 g), it will be necessary for some sample units to consist of more than one container.

For mixed nuts in containers less than or equal to 16 oz (454 g), the entire contents of each sample unit shall be used to form the composite sample.

For mixed nuts in containers larger than 16 oz (454 g), a composite of 80 oz (2.268 kg) of nuts from the five samples shall be formed as follows:

1. Empty contents of all the sample units into a deep pan or other container which will allow free manipulation of product.
2. Mix nuts thoroughly.
3. Extract 80 oz (2.268 kg).

Utilize all nuts in the composite sample, including identifiable (as to kind) broken pieces.

Calculate percentage of each kind of nut based on total weight of nuts in the composite sample.

5.5 Sampling. Types I, II, III, IV, V, VIII, and IX finished shelled roasted nuts shall be sampled for aflatoxin testing in accordance with PPB, FVP, AMS, USDA procedures.

6. ANALYTICAL REQUIREMENTS.

6.1 Analytical requirements. Unless otherwise specified in the solicitation, contract, or purchase order, the analytical requirements for the finished shelled roasted nuts shall be as follows:

6.1.1 Salt content. See Tables III and IV.

6.1.2 Moisture content. The moisture content of the Type V nuts shall not exceed 2.5 percent. The moisture content of the Type IX nuts shall not exceed 3.0 percent.

6.1.3 Aflatoxin. Types I, II, III, IV, V, VIII, and IX shall meet FDA guidelines of 20 ppb, the maximum level allowed in processed peanut products.

6.2 Product verification. When USDA verification of analytical requirements is specified in the solicitation, contract, or purchase order, the following procedures will be followed.

6.2.1 Sampling procedures. USDA inspection service will select the number of product containers based on USDA inspection service sampling procedures and plans.

6.2.2 Composite sample. Analytical testing shall be performed on a composite sample. The composite sample shall be 16 oz (454 g) and prepared from subsamples drawn from randomly selected containers. The number of subsamples used to create the composite sample shall be based on USDA procedures.

6.2.2.1 Preparation of sample for moisture analysis. The contents are grounded through a 3/16-in (0.476 cm) plate, mixed thoroughly and quickly by hand with a rubber spatula and stored in a moisture proof bag. For moisture determination on pouches of about 1.0 oz (28.35 g), only about 0.705 oz (20 g) are collected through the plate when using a grinding assembly requiring a 2-in (5.08 cm) diameter plate. Samples this small must have duplicate weighing immediately after grinding for moisture analyses. If only one weighing is made, a recheck of that prepared sample will result in an erroneous result because moisture is readily lost to the headspace when the sample reaches equilibrium with the headspace. When weighing the samples in duplicate as describe above, the replicates agree very closely. When comparing initial moisture results to moisture results from a sample aliquot held in a moisture proof sample bag, the held samples consistently had moisture losses that amounted to variations up to 25 percent. If duplicate weighings are made and the initial moisture is in specification, then the duplicate sample is discarded.

6.3 Analytical testing. When specified in the solicitation, contract, or purchase order, analyses shall be in accordance with the following methods from the Official Methods of Analysis of the AOAC International:

<u>Test</u>	<u>Method</u>
Aflatoxin	998.03
Salt	950.52
Moisture	925.40

6.4 Test results. The test results for aflatoxin shall meet FDA guidelines. The test results for salt and moisture shall be reported to the nearest 0.1 percent. Any result not conforming to finished product requirements shall be cause for rejection of the lot.

7. MANUFACTURER'S/DISTRIBUTOR'S PRODUCT ASSURANCE. The manufacturer/

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distributor shall certify that the shelled roasted nuts shall meet the salient characteristics of this CID, conform to their own specifications, standards, and quality assurance practices, and be the same shelled roasted nuts offered for sale in the commercial market. The purchaser reserves the right to require proof of conformance.

8. REGULATORY REQUIREMENTS. The delivered shelled roasted nuts shall comply with all applicable Federal, State, and local mandatory requirements and regulations relating to the preparation, packaging, labeling, storage, distribution, and sale of shelled roasted nuts within the commercial marketplace. Delivered product shall comply with all applicable provisions of the Federal Food, Drug, and Cosmetic Act, the Fair Packaging and Labeling Act, and regulations promulgated thereunder.

9. QUALITY ASSURANCE PROVISIONS. *Purchaser shall specify 9.2 or 9.3; purchaser may specify 9.1 with 9.1.1 or 9.1 with 9.1.2.*

9.1 Manufacturer's quality assurance. When required in the solicitation, contract, or purchase order, the product manufacturer shall be required to provide evidence, by certificate, that the manufacturing plant has undertaken one of the following quality assurance measures within 12 months prior to providing a bid, or no later than 10 business days from the date of awarding of the contract. Failure to provide this documentation within the proper time frame may result in the contract being terminated for cause.

9.1.1 Plant systems audit. A plant systems audit (PSA) conducted by USDA, AMS, or another audit performed by a third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS PSA verifies the manufacturer's capability to produce products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 – Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food, and have in place an internal quality assurance program. The AMS PSA determines the manufacturer's ability to produce under this CID, if the products of interest are identified at the time of the PSA).*

9.1.2 Plant survey. A plant survey conducted by USDA, AMS, or another survey performed by a third party auditing service is required within 12 months prior to the date of the awarding of the contract. *(An AMS plant survey audit verifies that, at the time of the survey, the manufacturer produces products in a clean, sanitary environment in accordance with Title 21 Code of Federal Regulations Part 110 - Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.)*

9.2 Manufacturer's/distributor's certification. When required in the solicitation, contract, or purchase order, the manufacturer/distributor will certify that the finished shelled roasted nuts distributed meets or exceeds the requirements of this CID.

9.3 USDA certification. When required in the solicitation, contract, or purchase order that product quality and acceptability or both be determined, the PPB, FVP, AMS, USDA, shall be the certifying program. PPB inspectors shall certify the quality and acceptability of the shelled roasted nuts in accordance with PPB procedures which include selecting random samples of the packaged nuts, evaluating the samples for conformance with the salient characteristics of this CID and other contractual requirements, and documenting the findings on official PPB score sheets and/or certificates. In addition, when required in the solicitation, contract, or purchase order, PPB inspectors will examine the shelled roasted nuts for conformance to the United States Standards for Condition of Food Containers in effect on the date of the solicitation.

10. PACKAGING. Preservation, packaging, packing, labeling, and case marking shall be in accordance with good commercial packaging unless otherwise specified in the solicitation, contract, or purchase order.

11. USDA INSPECTION NOTES. When Section 9.3 is specified in the solicitation, contract, or purchase order, USDA certification shall include evaluation of the quality and condition of samples of packaged shelled roasted nuts and compliance with requirements in the following areas:

- Salient characteristics (Sec. 5).
- Analytical requirements *when specified in the solicitation, contract, or purchase order* (Sec. 6.1). When USDA analytical testing is specified, PPB inspection personnel shall select samples and submit them to the USDA, S&TP laboratory for analysis.
- Packaging requirements (Sec. 10 or as specified in the solicitation, contract, or purchase order).

12. REFERENCE NOTES.

12.1 USDA certification contact.

12.1.1 USDA raw nut certification. For USDA raw nut certification, contact the **Branch Chief, FPB, FVP, AMS, USDA, STOP 0240, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-5870, Fax (202) 720-5136, or via E-mail: Leanne.Skelton@usda.gov.**

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12.1.2 USDA finished product certification. For USDA certification, contact the **Branch Chief, PPB, FVP, AMS, USDA, STOP 0247, 1400 Independence Avenue, SW, Washington, DC 20250-0247, telephone (202) 720-4693, Fax (202) 690-1527, or via E-mail: Terry.Bane@usda.gov.**

12.2 Analytical testing and technical information. For USDA technical information on analytical testing, contact the **Branch Chief, Technical Service Branch, Science and Technology Programs (S&TP), AMS, USDA, STOP 0272, 1400 Independence Avenue, SW, Washington, DC 20250-0272, telephone (202) 690-0621, or via E-mail: anita.okrend@usda.gov.**

12.3 Sources of documents.

12.3.1 Source of information for nongovernmental documents are as follows:

Copies of the Official Methods of Analysis of the AOAC International may be obtained from: **AOAC International, 481 North Frederick Avenue, Suite 500, Gaithersburg, MD 20877, telephone on (301) 924-7077. Internet address: <http://www.aoac.org>.**

12.3.2 Sources of information for governmental documents are as follows:

Applicable provisions of the: Fair Packaging and Labeling Act are contained in 16 CFR Parts 500 to 503 and the Federal Food, Drug, and Cosmetic Act are contained in 21 CFR Parts 1 to 199. These documents may be purchased from: **Superintendent of Documents, ATTN: New Orders, P.O. BOX 371954, Pittsburgh, PA 15250-7954. Credit card (MasterCard or Visa) purchases may be made by calling the Superintendent of Documents on (202) 512-1800 or on the Internet at: www.access.gpo.gov/nara.**

Copies of this CID and the United States Standards for Condition of Food Containers are available from: **Head, Food Quality Assurance staff, FVP, AMS, USDA, STOP 0243, 1400 Independence Ave., SW, Washington, DC 20250-0243, telephone (202) 720-9939, Fax (202) 690-0102, via E-mail: FQAStaff@usda.gov or on the Internet at: www.ams.usda.gov/fv/fvqual.htm.**

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: **Commander, Defense Supply Center Philadelphia, ATTN: DSCP-FTSL, 700 Robbins Avenue, Philadelphia, PA 19111-5092 or Fax (215) 737-2963, or via E-mail: Sally.A.Gallagher@dla.mil.**

Military activities should submit requests for copies of this CID to: **Standardization Documents Order Desk, Document Automation and Production Service, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.**

MILITARY INTERESTS:

Custodians

Army - GL
Navy - SA
Air Force - 35

CIVIL AGENCY COORDINATING ACTIVITIES:

DOJ - BOP
HHS - NIH, IHS
USDA - FV
VA - OSS

Review Activities

Army - MD, QM
Navy - MC

PREPARING ACTIVITY

DLA - SS
(Project No. 8925-P106)

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